

REMARKS

Responsive to the Office Action, Applicants have amended Claim 6 on line 13 to correct a spacing error for the word "stations".

Pursuant to the Examiner's objection to Claims 35 through 37, 47, 48 and 58, Claims 35 and 36 have been amended to recite that the coating set forth in Claim 34 is of a particular type as set forth in Claims 35 and 36, respectively. Support for the amendments to Claims 35 and 36 may be found in column 7, lines 15 through 20 of U.S. Patent 5,630,363.

The amendment herein to Claim 37, which is believed to overcome the objection, finds support in column 7 of the '363 patent at lines 49 through 60.

Claim 58 has been amended herein to overcome the objection with respect to the recitation on line 9 of "said first one of said flexographic stations".

With regard to the claims that have been rejected in this application as being anticipated by or being made obvious by the teaching of U.S. Patent 5,638,752 to Hartung et al., Applicants respectfully request reconsideration for withdrawal of this reference pursuant to the evidence submitted in the Joint Declaration Under 37 CFR 1.131 dated June 30, 2000 by Bill L. Davis and Jesse S. Williamson, the Declaration of Jesse Speight Williamson under 37 CFR 1.131 dated September 22, 2000, corroboration of the statements set forth in the two above-referenced Declarations by the Declarations of Gary Doughty dated September 24, 2000, the Declaration of Scott Brown dated December 21, 1999, the Declaration of Stephen Baker dated November 3, 1999, the Declaration of Steve M. Garner dated April 6, 2000 and the Declaration of John W. Bird dated December 11, 1999, all of record in this application.

In the Office Action, the Examiner has indicated that the Declarations of Jesse Speight Williamson, Gary Doughty and Steve M. Garner referred to in the amendment filed January 13, 2005, have been considered but are deemed ineffective to overcome the Hartung et al. reference. The Examiner has stated that the evidence submitted is insufficient to establish possession of the whole invention claimed. The Examiner alleges that the Declaration of Jesse Speight Williamson appears to only reveal the concept of placing a conventional end of press tower coater of a MAN-ROLAND 706 press "up front". Applicants respectfully submit that the Declaration of Jesse Speight Williamson dated September 22, 2000 refers further, in paragraph 8 thereof, to the initial idea of using an inline process with a flexographic unit "up front", the options for such an up front unit including a dedicated station, a bolt on device, or a rail traversing the press from which an anilox roller coating assembly could be lowered to any lithographic station or perhaps a flexographic station moving sideways into any desired lithographic station (emphasis added).

Still further, with regard to the Joint Declaration of Bill L. Davis and Jesse Williamson dated June 30, 2000, in paragraph 6 the Declarants stated that they "wanted to use flexography" at a printing station (emphasis added) designated to be upstream, perhaps even the first station of one or more printing stations of an offset lithographic press that WPC (Williamson Printing Corporation, the Assignee of the '363 patent) would receive from "Heidelberg". The Declarants further stated in paragraph 6 that the device could be a retractable or "rack back" mechanism sold in the trade which would have to be modified for "upstream" use and that the retractable mechanism with an anilox roller and a chamber doctor would be required. State of the art flexographic plates would be used, all as stated in paragraph 6.

Accordingly, the Declarants in these declarations clearly contemplated printing operations with a flexographic unit disposed "upstream" of a lithographic station or by converting any lithographic station in a multistation press.

The Examiner has further found insufficient the aforementioned Declarations in stating that the evidence submitted in the Declarations is insufficient to establish diligence from a date prior to reduction to practice of the Hartung et al. reference to either a constructive reduction to practice of the invention or an actual reduction to practice of the invention. The Examiner states that there is no diligence on the part of the inventors before April 4, 1994, the effective date of the Hartung et al. reference. However, as pointed out in paragraph 4 of the Joint Declaration by Bill L. Davis and Jesse Williamson dated June 30, 2000, that, although the conception of the invention claimed in the '363 patent took place at least as early as May, 1992, the assignee (Williamson Printing Corporation) of the '363 patent had undertaken a lengthy study to determine what presses needed to be purchased to replace existing outdated presses. Until the study was completed and new presses were installed, it was not practical to reduce to practice the process disclosed and claimed in the '363 patent. As those skilled in the art will appreciate, the expense of purchasing offset lithographic presses of the type contemplated by Williamson Printing Corporation (WPC) in the time period between May of 1992 and late 1994 and early 1995 precluded doing so just for testing a process and apparatus or system as set forth in Applicants' claims. An agreement was reached by WPC to purchase complex and expensive lithographic presses from Heidelberg USA and until these presses were installed, it would have been difficult, if not impossible, to test the process of placing a flexographic printing unit

upstream of lithographic printing units in a continuous inline type press.

The Examiner refers to MPEP §§ 715.07(III) and 715.07(a). As pointed out in §715.07(a), Applicants may be diligent within the meaning of the law when doing nothing if the lack of activity is excused and the record sets forth an explanation or excuse for this inactivity. The lack of activity in developing apparatus for a combined lithographic and flexographic printing process was explained in the above-referenced Joint Declaration (paragraph 4) and is corroborated in paragraph 9 of the Affidavit of John W. Bird dated December 11, 1999, wherein it is stated by the Declarant that he was aware in 1993 and 1994 that WPC was seeking to replace its aging printing presses with new state of the art presses and that by July of 1994 WPC had more or less decided to "go with Heidelberg USA" and purchase several different presses to be installed starting in late 1994 and running well into 1995.

The circumstances involving an effort to develop the invention of having a flexographic printing process performed prior to an offset lithographic process in an inline operation in one pass is also explained in the Declaration of Scott Brown dated December 31, 1999, in paragraphs 2 and 3 where the Declarant states that the Applicants wanted offline tests conducted on a one pass operation using flexography as a step prior to offset lithography, in early November, 1994. It is evident from the Declarations of record in this application that Applicants continued to pursue their invention but were hindered and delayed in further developing the invention by the process of making a final decision on the purchase by WPC of expensive and elaborate equipment. Still further corroboration of the complexities of reducing the invention to practice are set forth

in the Declaration of Steve M. Garner dated April 6, 2000, in paragraphs 4 and 10.

Accordingly, the lack of activity in reducing to practice the invention disclosed and claimed in the '363 patent, and in the instant application, is clearly evident as to its reasons and, it is respectfully submitted, this "lack of activity" is excusable and has been set forth in the record as identified above. The invention of placing a flexographic printing station ahead of one or more lithographic printing stations was clearly the invention of the patentees of the '363 patent and the Applicants in the above-identified reissue application. Reconsideration of the sufficiency of the Declarations of record in this application, including the Joint Declaration Under 37 CFR 1.131 dated June 30, 2000, the Declaration of Jesse Speight Williamson dated September 22, 2000, and the corroborating Declarations of John W. Bird dated December 11, 1999, of Gary Doughty dated September 24, 2000, of Scott Brown dated December 31, 1999, of Stephen Baker dated November 3, 1999 and of Steve M. Garner dated April 6, 2000, and withdrawal of the Hartung et al. reference with respect to the rejection of the claims pending in this application is respectfully solicited.

Notwithstanding the ineffectiveness of the Hartung et al. reference with respect to the independent claims currently pending in this application, Applicants request reconsideration for allowance of such claims for the reasons set forth herein. With regard to the rejection of Claim 10, under 35 U.S.C. 102(e) as being anticipated by the Hartung et al. reference, Applicants respectfully submit that the recitation in Claim 10 with regard to printing a first color image by a first flexographic station and the recitation of an offset lithographic station as a successive station for printing a second color image over the first color image in the continuous inline process is not

disclosed in or suggested by Hartung et al. Applicants submit that this recitation structurally limits the claim since the stations so recited inherently require structural limitations to provide for printing a first color image using a flexographic process and printing a second color image over the first color image using an offset lithographic process. Reconsideration for allowance of Claim 10 and dependent Claim 11 is therefore respectfully requested.

In the Office Action the Examiner rejected independent Claims 6, 15, 17, 58 and 161 under 35 U.S.C. 103(a) as being unpatentable over the teaching of Hartung et al. in view of the teaching of Bird (U.S. 4,841,903). Claim 6 requires a first offset flexographic printing station for printing an aqueous base vehicle image to form a metallic coating on a substrate, a dryer disposed downstream of the flexographic printing station in the direction of movement of the substrate for treating the image and at least one successive offset lithographic printing station downstream of the dryer for printing a color image over the aqueous base vehicle image. Hartung et al. does not use an offset flexographic station, nor is it indicated that Hartung et al. suggests printing an aqueous base vehicle image using a flexographic process wherein the image includes a suspended metallic material included in the aqueous base vehicle, nor does Hartung et al. suggest printing a color image over the aqueous based vehicle image using offset lithographic printing. Bird does suggest using a dryer disposed downstream of a printing station in the direction of movement of a substrate. Bird does not suggest modifying Hartung et al. to provide the offset flexographic process followed by printing over the flexographic image with a color image using offset lithographic printing.

Applicants respectfully submit that, in the crowded art of multistage printing, Applicants have recognized a combination of

features in a continuous inline printing system and process which has heretofore been ignored in and unappreciated by the art. The art is crowded and one might view Applicants' improvements as not being an important step. However, neither reference suggests the provision of an apparatus which can provide the treatment of a substrate in the overall manner required by Claim 6 and Claims 7 through 9 dependent thereon.

With regard to Claim 15, Applicants respectfully submit that the plural successive printing stations for printing color images on a substrate, as set forth in this claim, are not disclosed in or suggested by Hartung et al. as modified by Bird. As pointed out hereinabove, Hartung et al. does not disclose or suggest a first flexographic printing station for applying flexographic ink to form an image in combination with a first lithographic printing station. Still further neither Hartung et al. or Bird suggest this combination with a second lithographic printing station for receiving the image printed on the substrate and followed by printing an additional ink image on the substrate on top of a flexographic ink image using offset lithography and followed still further by a second flexographic printing station. Applicants respectfully submit that Hartung et al. fails to disclose a combination of printing stations wherein a flexographic station provides a flexographic ink image on a substrate followed by a lithographic printing station which prints an additional ink image on the substrate on top of the flexographic image and followed still further by a second flexographic printing station. Accordingly, the combined teaching of Bird and Hartung et al. does not provide the overall combination of a lithographic and flexographic printing apparatus as required by Claim 15 and reconsideration for allowance of this claim, together with dependent Claim 16, is requested.

The arguments set forth above with respect to Claim 15 are applicable to Claim 17 which requires an apparatus for combined lithographic and flexographic printing including a first flexographic printing station including a plate cylinder, a blanket cylinder and an etched anilox roller for applying flexographic color ink to a flexographic plate on the plate cylinder, together with an impression cylinder in ink transfer relationship with the blanket cylinder for transferring a flexographic color ink image to the substrate and wherein at least one succeeding printing station is a lithographic printing station for printing additional colored ink images on top of the flexographic ink image, and still further wherein a second flexographic printing station is provided. A distinguishing feature of the invention set forth in the instant claims, including Claim 17, is the provision of flexographic printing stations which actually print images and over which images lithographic images are printed. An apparatus and method for providing such is clearly delineated in Applicants' claims but not at all evident or obvious from the teaching of Hartung et al. or Hartung et al, as modified by the teaching of Bird. Although in hindsight it may seem obvious to provide a combination of elements which will provide the results set forth in Claim 17, the prior art fails to disclose or suggest the combination. Reconsideration for allowance of Claim 17 and Claims 18 through 28, dependent thereon, is requested.

With regard to the rejection of Claim 58, the arguments set forth above with respect to Claims 15 and 17 are also applicable. As pointed out hereinabove, Hartung et al. fails to disclose or suggest a flexographic printing station which will form an image on one side of a substrate and at least one subsequent lithographic printing station for receiving the image printed substrate and printing an additional colored ink image

on the substrate on top of the flexographic ink image. A suggestion to provide such an apparatus is clearly missing from the teaching of Hartung et al. or Hartung et al. as modified by Bird and reconsideration for allowance of Claim 58 is requested.

Reconsideration for allowance of Claim 161, and Claims 162 through 164, dependent thereon, is requested also substantially for the reasons set forth above in support of the patentability of Claims 15, 17 and 58. Claim 161 requires apparatus including plural successive printing stations for printing color images including a first flexographic printing station for printing an image using a flexographic process and a first lithographic printing station subsequent in the inline printing process for printing an image on the substrate, together with a dryer disposed between the printing stations for drying the image printed by the first flexographic printing station. Hartung et al. fails to disclose or suggest this arrangement of flexographic and lithographic stations for printing images on a substrate. Hartung et al. uses the term printing but only discloses the "printing" of "coatings" or "lacquers".

Reconsideration for allowance of independent method Claims 29, 38 and 156 is requested. These claims have been rejected under 35 U.S.C. 103(a) as being unpatentable over Hartung et al. in view of the Pantone reference. With regard to Claim 29, as pointed out herein previously, Hartung et al. does not suggest a method of combined lithographic and flexographic printing which includes printing a flexographic ink image on a substrate at a first flexographic station and transferring the substrate to a lithographic station and printing colored ink images on top of the flexographic ink image at the subsequent lithographic station and then coating over the ink images at a second flexographic printing station. The Examiner argues that Hartung et al. repeatedly discloses that the flexographic stations are

"printing/lacquering units" implying that the stations could provide a lacquer or print "images". Applicants disagree with this "implication" as it is clear from the teaching of Hartung et al. that the flexographic units are used for applying protective coatings but not printed images and not printed images over which color images are printed by a lithographic process. This is clearly one of the important steps in the present invention that is not taught or suggested by Hartung et al. taken alone or as modified by Pantone.

In Claim 156, with regard to the order of printing images on a first side of a substrate using lithographic and flexographic printing stations as required by this claim, and as pointed out hereinabove, Hartung et al. as modified by Pantone fails to suggest a method as set forth in the claim of printing an image at a first lithographic printing station, printing an image at a first flexographic printing station, then printing an image on the same side of a substrate at a second lithographic printing station and then printing an image on the same side of the substrate at a second flexographic printing station.

The further rejection of independent Claim 17 and dependent Claims 20-23 and 25-28 under 35 U.S.C. 103(a) over Hartung et al. in view of Pantone and further in view of Bird is believed to be improper for the reasons set forth hereinbefore, particularly with respect to the printing of color ink images by a first flexographic printing station, as set forth in Claim 17.

With regard to Claim 37, this claim is rejected under 35 U.S.C. 103(a) over Hartung et al. in view of Pantone, Bird and further in view of U.S. Patent 4,403,550 to Sharp. As argued hereinabove with respect to the other obviousness rejections over the principal reference of Hartung et al., as modified by any of the references, a salient feature that is missing from the prior art is the disclosure of or suggestion in the prior

art to provide either an apparatus or a method of a combined lithographic and flexographic printing system or process wherein a pattern or image of flexographic ink is applied to a substrate and either a lithographic image is then printed over the flexographic image or, as recited in Claim 37, a pattern of flexographic ink is applied to the substrate at a second flexographic printing station and then an ink pattern is applied over at least one of the flexographic ink patterns on the substrate using a subsequent offset lithographic printing station. None of the combinations of teachings of the art of record provide this process and reconsideration for allowance of Claim 37, as currently amended, is requested.

Reconsideration for allowance of Claims 154 and 158 is requested. With regard to the rejections of Claims 154 and 158, as in the arguments set forth above with respect to the steps of printing images using flexographic stations and lithographic stations in alternating relationships, the prior art fails to disclose or suggest a method or an apparatus for combined lithographic and flexographic printing wherein images are printed at both the flexographic and lithographic stations and in the sequences provided in these claims.

In summary, Applicants verily believe that the Hartung et al. reference should be set aside and not serve as a basis for the rejection of any of the claims in this application, in that Applicants have established the concept of placing a flexographic printing station up front or ahead of a lithographic printing station in an inline printing process. Applicants respectfully submit that the Declarations referenced herein and of record have established diligence within the meaning set forth in MPEP 715.07(a) up to the date of filing the application which matured as the '363 patent.

Applicants acknowledge the obligations set forth in the Office Action, including that required under 37 CFR 1.178(b) to apprise the Office of any prior or concurrent proceeding. There is no interference, reexamination, copending application or reissue other than the instant application, nor litigation involving U.S. Patent 5,630,363 which has not previously been reported. Applicants also acknowledge the continuing obligation under 37 CFR 1.56. A Supplemental Declaration (Form PTO/SB/51S) duly executed by the Applicants is enclosed herewith.

Consideration for allowance of the claims currently pending in this application and previously rejected, is respectfully solicited.

Respectfully submitted,

Date: 9/27/05

Michael E. Martin
Michael E. Martin
Registration No. 24,821
Agent for Applicants

Gardere Wynne Sewell LLP
1601 Elm Street, Suite 3000
Dallas, Texas 75201-4761
Phone (214) 999-3000
Fax (214) 999-3623